

Work Order ID 121394

Thursday, June 26, 2014 2:58:32 PM

121394

Page 1

Item ID: D4920-1 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: End Fitting
Start Date: 6/26/14 Start Qty: 18.00 ***18*** Cust Item ID:
Required Date: 6/26/14 Req'd Qty: 18.00 ***18*** Customer:
Reference:

Approvals: Process Plan: WLS Date: 4-06-27 Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4920	REV A								

100

0.00

100

Outsource5

Outsource process - Machining

Memo

ISSUE P/O: 24906
POSSIBLE SUPPLIER: ATG

C OF C IS REQUIRED

0.00

CL 14/107/08 12

110

QC6- Inspect dimensions to drawing

0.00

110

QC

Quality Control

Memo

0.00

12x SP5-01-7

150

0.00

150

Purchasing

Purchasing

PURCHASING

Memo

Issue P/O: 24906
LPI Per ASTM 1417 LEVEL 2
Certificate of conformaty is required

0.00

done @ ATGCL 14/107/08

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐															
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐															
Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Work Order ID 121394***121394***

Page 2

Item ID: D4920-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: End Fitting

Start Date: 6/26/14

Start Qty: 18.00

18

Cust Item ID:

Required Date: 6/26/14

Req'd Qty: 18.00

18

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

Receive & Inspect for Damage & Mat'l Certs

0.00

160

Packaging

Memo

0.00

Packaging

Ensure certificate of conformity is attached

12x SP15-01-7

165 St

138

12

JAN 07 2015

DAS
06
9-89

190

QC21- Final Inspection - Work Order Release

0.00

190

QC

Memo

0.00

MCJ 15-01-08

Quality Control

15-1-8

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____ Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Crosstube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Picklist Print

Thursday, June 26, 2014 2:58:32 PM

Page 1

Work Order ID: 121394

121394

Parent Item: D4920-1

D4920-1

Parent Item Name: End Fitting

Start Date: 6/26/14

Required Date: 6/26/14

Start Qty: 18.00

Required Qty: 18.00

Comments: IPP REV:A NEW ISSUE 14-01-28 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4920-1P		Purchased	No				Each	0.0000		18			
D4920-1P									**				
End Fitting													
M174PH-H900R1.500		Purchased	No				f	31.8583		6.66			
M174PH-H900R1 500									**				
17-4SS H900 ROUND BAR 1.500													
				<u>Location</u>			<u>Loc Qty</u>		<u>Loc Code</u>				
				MAT031			31.8583						
				M128809			31.8583						
										<u>6.6</u>			

02 15/01/07

14-7-10

68-6
E1
SVC

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

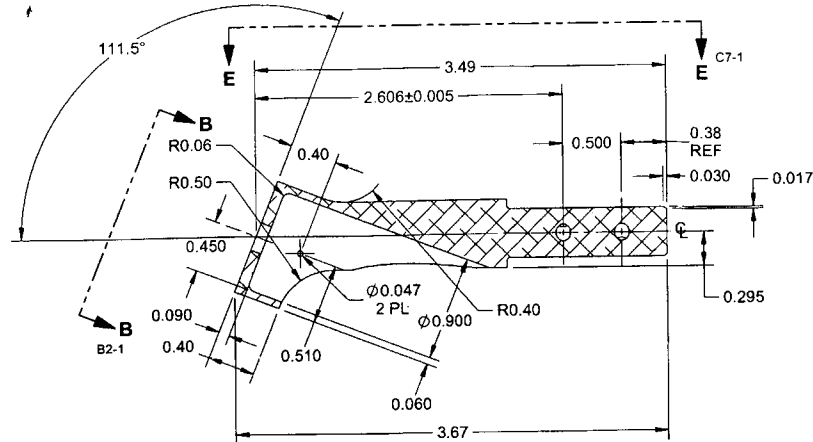
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Crosstube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐
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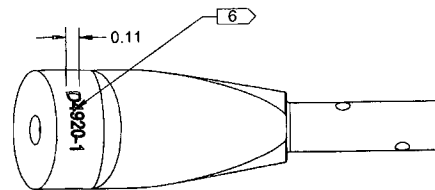
Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

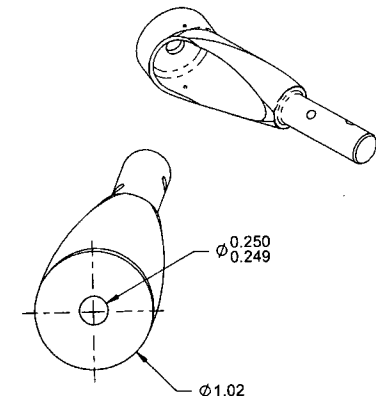
Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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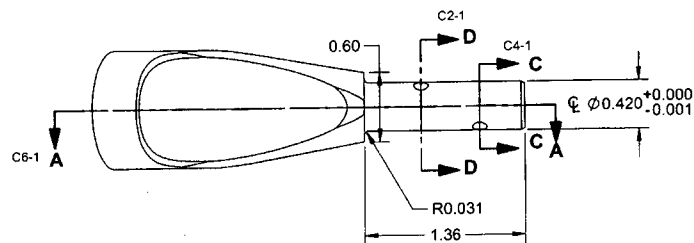
SECTION A-A 85-1



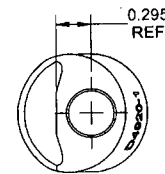
AUXILIARY VIEW E-E C7-1



AUXILIARY VIEW B-B C7-1



SECTION C-C C5-1



SECTION D-D C5-1

D4920-1 END FITTING

NOTES:

- 1) MATERIAL: 17-4 PH/S17400/TYPE 630 SS ROUND BAR, H900 CONDITION
PER AMS 5643/ASTM A564
DART SPEC M17-4-R
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.3.
ENGRAVE P/N USING 0.11 HIGH LETTERS TO A MAX. DEPTH OF 0.010
- 7) WEIGHT: 0.21 lbs
- 8) LIQUID PENETRANT INSPECT PER QSI 038 6.1.1 (ASTM E1417 LEVEL 2)

A	NEW ISSUE	RF	13.09.16
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	HS	DRAWING NO.	REV. A
MFG. APPR.	JLM	D4920	SHEET 1 OF 2
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	END FITTING	NTS
DATE	13.12.15	COPYRIGHT © 2013 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

SHOP COPY
 RETURN TO
 ENGINEERING
 UNCONTROLLED COPY
 SUBJECT TO AMENDMENT
 WITHOUT NOTICE
 WORK ORDER

NO. 121394 MJS
 1406-27

DART
AEROSPACE

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO24906

Purchase Order Date 7/8/2014

PO Print Date 8/20/2014

Page Number 4 of 8

Order From:

VC-ATG001

A.T.G. INDUSTRIES INC.
731 INDUSTRIELLE ROAD
ROCKLAND, ON K4K 1T2
CANADA

Ship To: DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 613-446-4544

Ship To Contact

Ship To Phone

Ship Via:

Ship Acct:

VENDOR'S TRUCK

Buyer

Customer POID

Customer Tax #

Terms

Currency

FOB

Chantal Lavoie

10127-2607

Net 30

CAD

FCA - (Free Carrier)

Line Total:

D4805-1P

End Fitting

12/19/2014 FN

Yes

12/19/2014

20.00 ✓
Each

\$138.50

AS PER DWG D4805-1 REV. A
6121426

SP14-12-16

Line Total:

D4920-1P

End Fitting

12/19/2014 FN

Yes

12/19/2014

12.00 ✓
Each

\$164.00

AS PER DWG D4920-1 REV. A

6121391

MATERIAL 174PH-H900R 1.5" M128809

SP15-01-7

Line Total:

D4884-3P

End Fitting, Eye

12/19/2014 FN

Yes

12/19/2014

16.00
Each

\$122.50

AS PER DWG D4884-3 REV. A

6121363

MATERIAL 174PH-H900R 1.5" M128809

Note:

8/20/2014



A.T.G. INDUSTRIES INC.
731 INDUSTRIELLE STREET
ROCKLAND, ON K4K 1T2
Canada

Ph: (613) 446-4544
Fax: (613) 446-4556

Pack List

Number: 909409

Date: 07-Jan-15

To

DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7
Canada

Ship To

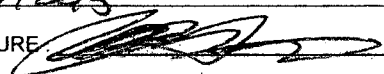
CHANTAL LAVOIE
DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7
Canada

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms		Ship Via	
Quantity	Description		
PLEASE REFERENCE THE PACK LIST NUMBER ON ALL CORRESPONDENCE TO THIS SHIPMENT. IF YOU HAVE ANY QUESTIONS, PLEASE CALL AT (613) 446-4544.			
✓ 12 ea	Part: D4920-1P END FITTING Job: 16645	Rev: A PO: PO24906	Line: 10 <i>8015-017</i>
16 ea	Part: D4884-3P END FITTING, EYE Job: 16646	Rev: A PO: PO24906	Line: 11
18 ea	Part: D4920-3P END FITTING Job: 16651	Rev: A PO: PO24906	Line: 16
DATE: <i>07/01/2015</i>			
CERTIFIED SIGNATURE: 			
RECEIVER SIGNATURE: _____			
Note: This Packing Slip may contain parts that have been PLATED. Items that are plated may be subject to natural tarnishing and it is suggested that they be inspected within 24 hours of receipt.			
CERTIFICATE OF CONFORMANCE			
A.T.G. INDUSTRIES INC. CERTIFIES THAT ALL ITEMS IN THIS SHIPMENT CONFORM TO THE REQUIREMENTS.			
MADE IN CANADA.			

SP 15-01-7



F.A.I.

First Article Inspection Report

#

530

Requesting Company:	Dart Aerospace	PO#:	PO24906	Line:	10	Qty:	12
Part Number:	D4920-1P	Rev:	A	Part Description:	End Fitting		
FAI Supplied by:	A.T.G. Industries Inc.	FAI Prepared by:	Emily Louis-Seize	Date:	July 14, 2014		
Qty Inspected:	12	FAI Inspected by:	Mike Csontos	Date:	December 15, 2014		

Material and/or Special Processes

Type	Description	Specification Number/Code	Certificate of Conformance Number:
Material	17-4SS H900		Supplied by Customer
Special Process	Liquid Penetrant	QSI 038 6.1.1 (ASTM E1417 Level 2)	PO#: 20140525

Inspection Information and Results

Char#	Location	Requirement	Result	UoM	Pass/Fail	Measurement Equipment:	Operation #:
1	D6	3.49	3.485	inch	Pass	Vernier Caliper	2
2	D7	2.606±.005	2.603	inch	Pass	Height Gauge	4
3	D7	.040	.400	inch	Pass	Micrometer	2
4	D6	.500	.499	inch	Pass	Height Gauge	4
5	D5	.38 REF	.380	inch	Pass	Height Gauge	4
6	D5	.030	.027	inch	Pass	Comparator	1
7	D5	.017	.018	inch	Pass	Comparator	1
8	D5	.295	.296	inch	Pass	Height Gauge	2
9	C6	3.67	3.670	inch	Pass	Height Gauge	2
10	C6	R.40	R.40	inch	Pass	Radius Gauge	2
11	C6	Ø.900	Ø.904	inch	Pass	Vernier Caliper	3
12	C6	.060	.054	inch	Pass	Micrometer	3

Inspection Information and Results

Char#	Location	Requirement	Result	UoM	Pass/Fail	Measurement Equipment:	Operation #:
13	C7	Ø.047	Ø.049	inch	Pass	Gauge Pin	2
14	C7	.510	.511	inch	Pass	Height Gauge	2
15	C8	.40	.399	inch	Pass	Vernier Caliper	2
16	C8	.090	.090	inch	Pass	Micrometer	3
17	D8	.450	.455	inch	Pass	Height Gauge	3
18	D8	R.50	R.50	inch	Pass	Radius Gauge	2
19	D8	R.06	R.06	inch	Pass	Radius Gauge	3
20	D8	111.5°	111.5°	degree	Pass	Comparator	2
21	D4	.11	.120	inch	Pass	Vernier Caliper	2
22	D4	Note 6	D4920-1	n/a	Pass	Visual	2
23	D2	Ø.250/.249	Ø.2495	inch	Pass	Gauge Pin	2
24	C2	Ø1.02	Ø1.02	inch	Pass	Vernier Caliper	2
25	B6	.60	.602	inch	Pass	Comparator	1
26	B5	Ø.420+.000/-.001	Ø.4197	inch	Pass	Micrometer	1
27	B6	1.36	1.358	inch	Pass	Vernier Caliper	1
28	B6	R.031	R.03	inch	Pass	Radius Gauge	1
29	B4	.295 REF	.296	inch	Pass	Height Gauge	2
30	B3	30°	30°	degree	Pass	Comparator	3
31	B3	Ø.125	Ø.125	inch	Pass	Gauge Pin	3
32	B1	30°	30°	degree	Pass	Comparator	3
33	B2	Ø.125	Ø.125	inch	Pass	Gauge Pin	3
First Article Inspection Report Approved and Completed in Full by:							
				Date: 6-Jan-15			



skyservice Work Order Traveler

Sky Service F.B.O. Inc.

DOT APP 53-89 / EASA 145.7142 / BDA AMO 385

WO #: MWO23142	Customer: ATG Industries Inc	Dept: NDT YUL	Reference: 20140525
Descr:	PN:	S/N:	Qty: 1
Make:	Model:	Reg:	A/C S/N:
TSN:	CSN:	TSO:	
Task: UNSCHEDULED			Sequence: 1

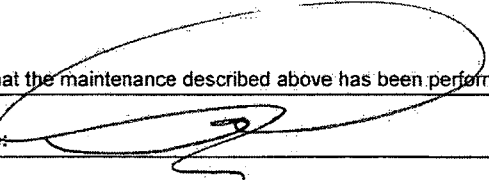
Work Required:

CARRY OUT NDT ON SEVENTY-FIVE PARTS AS PER PO : 20140525)

CLEVIS	P/N D4806-1P QTY:12
END FITTING	P/N D4920-1P QTY:12)
END FITTING EYE	P/N D4884-3P QTY:16
END FITTING	P/N D4885-5P QTY:6
END FITTING	P/N D4885-7P QTY:11
END FITTING	P/N D4920-3P QTY:18

Action Taken:					Date:	Initial/Stamp:
LIQUID PENETRANT INSPECTION CARRIED OUT AS PER ASTM E-1417M-13					JAN 06 2015	 
NO CRACK FOUND						
PEN.(ZL-37 , B#10A070), DEV.(SKD-S2,B#13D14k) , EMU.(ZR-10B,B#10A074).						
Description	Location	P/N	Qty	Batch	S/N Off	S/N On

I certified that the maintenance described above has been performed in accordance with the applicable standard of airworthiness.

Signature: 	ACA/SCA Stamp 	Date: JAN 06 2015
Name: RAFIK MELIKIAN		

SKYM002-1 REV 4 Mar/14

COPY